

LAVA/Cooperators Meeting
October 11, 2017
Brush Creek/Hayden Ranger District
Meeting Focus: Medicine Bow Landscape Vegetation Analysis (LaVA)

Note: Itinerary deviations were necessary at some stops due to high winds. The Handout 'STOP Handouts with Changed Itinerary' depicts the deviations

Attendees:

Bret Callaway, WYDEQ	Justin Williams, WDA	Scott Russell, USFS
Ryan Nupen, USFS	Aaron Lumley, WSFD	John Laughlin, SHPO
Daron Reynolds, USFS	Ryan Amundson, WGFD	Erica Duvic, SHPO
Mark Westfahl, USFS	Carson Engelskirger, WSFD	Larry Hicks, LSRCD
Casey Whitman, CBOPU	Travis Pardue, WSFD	John Schneider, USFS
James Anderson, CBOPU	Chris Wichmann, WDA	Melanie Fullman, USFS
Merna Carver, WYDOT	Karmen Rossi, Rep. Cheney	Keith Brugger, USFS
Ralph Tarango, WYDOT	Sarah Hutchins, Carbon Co.	Melissa Martin, USFS
Timothy Morton, WYDOT	Martha Wilson, Sen. Enzi	Paula Guenther, USFS
Larry Munn, LRCD	Laura Curran, Sen. Barrasso	Tim Douville, USFS
Ruth Shepherd, LRCD	Chance Kirkeeng, WGFD	Michael Salazar, USFS
Martin Curry, LRCD	Corey Class, WGFD	Steve Loose, USFS
Tony Hoch, LRCD	Leanne Correll, SERCD	Seth Kuchenbecker, USFS
Dave Gloss, USFS	Mark Conrad, WGFD	Chuck Oliver, USFS

Introductions, Project Overview, and Safety

Project Overview: The LaVA is a large, landscape-scale vegetation analysis intended to produce one decision to authorize vegetation management on the Snowy Range and Sierra Madre Mountain Ranges for the next 10-15 years. The LaVA responds to unprecedented tree mortality from bark beetle epidemics and other forest health issues by accelerating vegetation treatments to restore forest resiliency and to improve forest conditions across the two mountain ranges. The Forest Service has been working with numerous cooperating agencies since March of this year to develop the LaVA Proposed Action, which includes **up to** (maximum amount of treatment):

- 95,000 acres of Stand Initiation treatments (e.g., Clearcutting);
- 165,000 acres of Intermediate treatments (e.g., Overstory Removal);
- 100,000 acres of 'other' treatments (Prescribed Fire, Aspen Enhancement, etc.); and
- 600 miles of temporary road construction.

The LaVA analysis area includes roughly 850,000 acres of National Forest System (NFS) lands and 50,000 acres of other lands. National Forest System lands have been broken into 'No Treatment Areas' and two types of 'Treatment Opportunity Areas' (TOAs): Mechanical *and* Prescribed Fire/Hand Tool Only. As depicted on the next page, No Treatment Areas total about 235,870 acres (White), while Mechanical TOAs include roughly 561,415 acres (Brownish), and Prescribed Fire/Hand Tool Only TOAs include roughly 51,435 acres (Grey) (or roughly 612,850 TOA acres combined). The No Treatment Areas and TOAs were identified by reviewing applicable laws, regulations, policies, and direction contained in the Medicine Bow National Forest Plan (Revised, 2003).

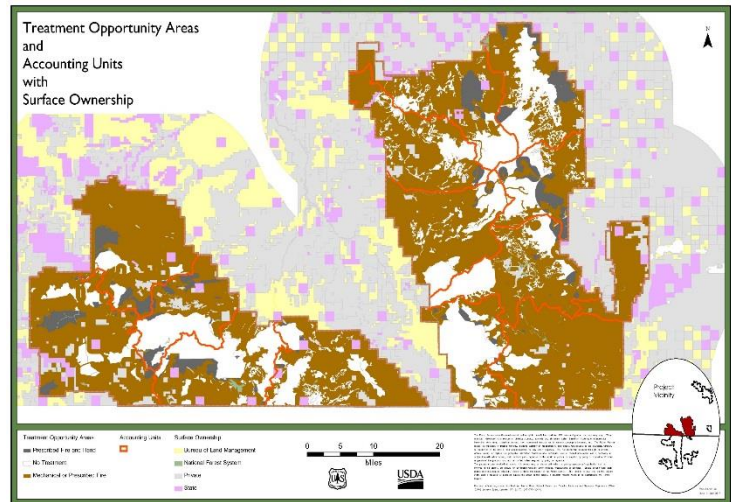
The TOAs represent areas where the Forest Service and our cooperators can go to accomplish project objectives; they are not meant to indicate that treatments will occur on every TOA acre. The Proposed Action provides limitations regarding how much activity could occur across the TOAs over the life of the

project, as shown above. Design and layout, during completion of required field checklists, would also limit how much of each TOA is affected by individual projects.

The analysis area has been further broken into 14 'Analysis Units (AUs)' to facilitate effects analysis, decision making, and project implementation. Each of the 14 AUs incorporates a lynx analysis unit (if applicable) and a contiguous group of 7th level watersheds. The AUs will be used to increase site-specificity, demonstrate Forest Plan consistency, and NEPA compliance.

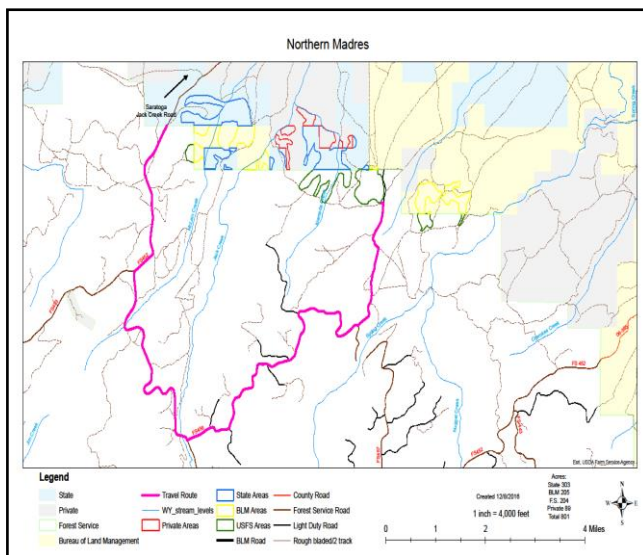
The LaVA Scoping period extended from July 21, 2017 to August 21, 2017; 58 comment letters were received. The Forest Service hosted two Open House meetings, one in Laramie and one in Saratoga; cooperating agency participation and support was robust.

Scoping issues include: the level of site-specificity needed; the scope and scale of the project; treatments in unroaded or inventoried roadless areas; miles of temporary road construction; and perceived lack of public engagement opportunities to date.



STOP 1 - Forest Service Boundary on NFSR 452: This stop demonstrated how partnerships can augment accomplishments in a mixed ownership setting. The area was part of a potential partnership project between WGFD/WSFD/BLM/USFS/PVT landowners that was called the Southern Wyoming

Active Management Partnership (SWAMP). Several areas (small blue, yellow, and red polygons) are outside of the forest boundary, but are still in need of treatment (small green polygons are treatments on NFS lands). These areas provide a high value for wildlife transition habitats and often go overlooked for several reasons. With LAVA forthcoming, the SWAMP project was shelved.



With the greater flexibility for options potentially provided through LAVA, it would make sense to look at these periphery units through some type of stewardship/Good Neighbor Authority (GNA) work. LAVA would provide the "anchor volume" and make it economically viable to re-look at treating these stands when crews are in place.

There would need to be some coordination during the layout and design between federal, state and local partners, but it would be a way to further maximize the benefits of LAVA.

STOP 2 - Intersection with NFSR 452.2B (see Handout: Proposed Action Definitions 10/10/17):

This stop demonstrated the challenges of working in high mortality beetle stands and was a segue-way for introducing how the LaVA Proposed Action Treatment Caps were identified. The Forest Service used a database called FSveg, which houses a multitude of timber data, to compare mortality rates pre- and post-beetle epidemic. Stands that had greater than 50% mortality were classified as Stand Initiation (95,000 ac.); stands with 30-49.9% mortality were classified as Intermediate (165,000 ac.); and stands with 0 – 29.9% mortality fell into the 'other' category (100,000 ac.). All vegetation treatments would be

field verified prior to any ground disturbing activities. During field verification, we would be able to determine the accuracy of the database information and design projects that best meet the on-the-ground conditions. For example, if a stand fell into the Intermediate category, per the database, but field verification indicates that mortality is moderate and dwarf mistletoe infestation is high, we could perform a Stand Initiation treatment. The key would be to track treatment types to ensure that overall Proposed Action Treatment caps are not exceeded.

Tim Douville spoke to the **Handout**, indicating that there are different types of silvicultural treatments that could be implemented within the various treatment caps. For example, clearcutting, coppice cuts, and stand replacing fires are all tools that could be used to accomplish the 95,000 acres of Stand Initiation treatments. Thinning, sanitation, and salvage are of examples of tools that could be used to accomplish Intermediate treatments. There is some overlap between tools available and cap types, primarily because we have different objectives for different stands.

The stands in this area were treated under a Service contract in the 1980s. The stands were overstocked and dense, but were thinned to a 10-12 foot spacing. The picture on the left is the thinned stand that currently has less than 10% mortality. The picture on the right is from an adjacent, un-thinned stand. The objectives between the two stands would be very different. On the left, we might want to thin it again to make it beneficial for future timber production. On the right, we might want to do an overstory removal to remove the overstory. The LaVA will allow the flexibility, in the moment, to make these determinations and implement the most appropriate treatments.



STOP 3a - Inside Jack Creek Work Center (itinerary deviation due to high winds): John Schneider (USFS) provided an historical overview of timber management at the Work Center. The area was characterized by wildfires that left behind a lodgepole pine dominated landscape including islands of old timber. In 1972, a road was built to access timber, primarily old growth stands, leaving behind dense young growth. From 1970 - 2000, approximately 40-50 MMBF were harvested from the area. The dense, young trees that were left behind were impacted most severely by the recent beetle infestation.

Question: When does merchantability of the beetle killed trees end? **Response:** That is dependent on a lot of factors and markets. The dead trees are remaining viable longer than anyone expected and new markets have been created.

Question: What is the shelf life of NEPA and how does it compare to the life of the trees? **Response:** We should be reviewing our active decisions and corresponding NEPA documents every five years to check for things like new species, changed conditions, new regulations, etc. The LaVA is intended to be implemented over a 10-15 year period and we will have to monitor the project accordingly. We will also have to develop assumptions about economic viability of dead trees, sliding scales for increased defect over time, etc. for the Draft Environmental Impact Statement (DEIS).

Temporary Road Construction: John also spoke about temporary roads and when they are appropriate. Temporary roads are for uses that are short in duration and for short distances. They are not surfaced, are generally of low maintenance, and are to be closed after use is completed. Closure specifications are generally outlined in the timber sale contract and can include such methods as placing boulders, creating berms, felling trees, etc. Temporary road locations are agreed upon by the timber purchaser and the Forest Service during field reconnaissance so as to determine the least disturbing location. In some cases, minimal drainage features are necessary to protect area resources. However, if a road needs too much design, one might consider constructing a system road (one that is included on our transportation maps). Or, one might consider using the road only during winter months, when the ground is frozen, to minimize impacts.

Question: LaVA proposes 600 miles of temporary road construction. What percent of temporary roads are successfully closed? **Response:** Around 95%. Some are reused for new sales and closed later than the original sale.

Although temporary roads are not intended for public use, they can still be used illegally by UTVs and ATVs. Temporary roads, when in use, impact wildlife similarly to open roads and act as a disturbance feature shown to push out elk, songbirds, and deer. We do our best to effectively close such roads, but sometimes we have to go back to fix them.



Temporary road in use.



Closed temporary road.

Hydrologic impacts of temporary roads – *Dave Gloss*




The act of harvesting timber has less of an effect on a watershed than the transportation system created to remove the timber, particularly if temporary roads are the primary means of access. These roads are not constructed to as high of a standard as system roads (i.e., less drainage) and can contribute to pooling and increased turbidity near waterbodies. Although the length of time that the roads are in use is relatively short, the effects of the roadbed are longer lasting. If we assume effective closure on 95% of temporary roads, we can expect 30 miles of unintended roads from the LaVA Project (proposes 600 miles).

Question: What specifically about temporary roads affects the watershed? **Response:** It varies by project. However, roughly 30-40% of temp roads still have some type of hydrologic resource effect 10-30 years after closure, depending on how they are closed.

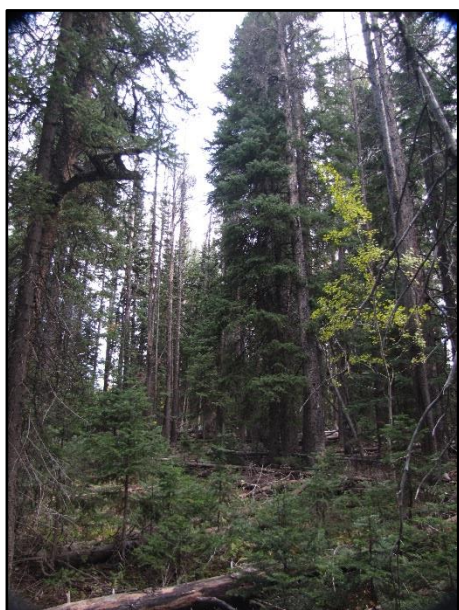
Question: Are culverts removed from temporary roads? **Response:** Yes, all culverts and bridges must be removed. This information is generally included in the contract.

Fuel Types – *Daron Reynolds* (see Handout: Fuel Model Information)

Data used for fuel modeling is very complex. For LaVA, both fuel modeling and results from the FSveg database were used when developing the Proposed Action. Fuel models of concern include TU5, TL3, and TU1. Flame lengths make a difference in how we control and snags make it dangerous for us to be in a stand.

		
<p>TU5 - Timber-Understory 5 (Very High Load Dry Climate Timber-Shrub): 39,617 acres in Carbon/Albany Counties communities “at-risk”</p>	<p>TL3 - Timber-Litter 3 (Moderate Load Conifer Litter): 64,771 acres in Carbon/Albany Counties communities “at-risk”</p>	<p>TU1 - Timber-Understory 1 (Low Load Timber-Grass-Shrub Dynamic): 31,355 acres in Carbon/Albany Counties communities “at-risk.” This fuel model is one that would likely be promoted during project implementation because of its naturally fire-resistant properties.</p>

STOP 3b – Gravel Pit near Jack Creek Work Center: The purpose of this stop was to discuss different treatment options for stands with mixed tree species. The stand to the south of the gravel pit is characterized by lodgepole, spruce-fir, and aspen with considerable mortality and/or disease present.



Daron indicated that considerations in this area are the high timber volumes and fuel loading. Since aspen is present and near infrastructure (work center), we might try to promote aspen as a natural fuel break. From a fire/fuels perspective, the best treatment would be to burn the stand. However, this fuel type is likely to spot and could burn with high BTUs (British thermal unit) which could lead to control issues. If spot fires ignited in locations not covered by the LaVA NEPA, they would need to be suppressed. So, to make the treatment most feasible and effective, it might be best to treat first with mechanical removal and then burn to reduce fuels and stimulate aspen. With the flexibility afforded by the LaVA, we could make these important determinations when the time is ripe to implement management actions.

Question: Why is neighboring site regenerating solely with lodgepole pine? **Response:** It is a drier site and, with full sunlight, favors lodgepole pine.

Question: Do acres burned from natural ignitions count toward lynx habitat changes? **Response:** Yes, if it is considered suitable habitat now. If it's not suitable, then it doesn't change the accounting.

Question: Is this gravel pit site suitable lynx habitat? **Response:** Not in Steve Loose's opinion (USFS Wildlife Biologist).

Question: Does FS do snowshoe hare surveys? **Response:** No, snowshoe hare habitat is derived from vegetation model and can be corrected by ground trothing during monitoring or project implementation.

Question: What about where houses and other infrastructure are built in forest. What obligation do private landowners/cabin owners have to create defensible space? **Response:** The Forest Service will assist with suppression overall, but cannot perform structural protection measures like wrapping with fire proof material, etc. Property owners have that responsibility.

Question: What is the role of State Forestry through USFS State and Private Forestry Programs to assist landowners? **Response:** The best opportunity is Community Action grant funds available through the National Fire Plan. The priorities are for protection and landowner creation of defensible space. Stewardship programs are another good option.

STOP 4 – In Concept. Field Trip Wrap-up

We did not stop here due to safety considerations. The purpose of this stop was to have been a discussion of the LaVA Project Scope and Scale and Landscape Outcomes. The picture is from the Deep Jack Overlook. If it were larger, you could better see the young, green trees in the foreground and the green patches of previously managed areas and the grey cast denoting the dead trees in the background.



USFS Question to Cooperators: Do you feel like you have a better idea of the scope, intent, and objectives of the project? Can cooperators help us distribute accurate project information?

Cooperator Response: Ruth Shepard (LRCD) stated that she understands the project and feels like she can better describe it. However, she would not feel comfortable answering detailed questions. Others concurred with Ruth's assessment.

Forest Service Response: We don't expect cooperators to know all of the project details and to be able to thoroughly describe the project to the public. That's what we're here for. People should call Melissa Martin at (307) 745-2371; Paula Guenther at (307) 745-2310; Frank Romero at (307) 745-2337; or Melanie Fullman at (307) 326-2501.

LaVA Next Steps: We are hoping to release the LaVA DEIS by mid-end January. We are incorporating a 2-3 week review period for our LaVA Cooperators prior to releasing the DEIS to the public. We will also be hosting additional public meetings during the DEIS public comment period and have been thinking of other ways to improve our public engagement efforts.

Thank you so much for your interest in managing the Medicine Bow National Forest and in the LaVA Project!